

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000629

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C22B 3/42

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C22B, C25C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## EPO-INTERNAL, WPI DATA, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3682589 A (RAYMOND H. MOORE), 8 August 1972 (08.08.1972), column 3, line 70 - column 4, line 43, abstract ---	1,4-10
Y	WO 0134856 A1 (HOLBRAY PTY LTD), 17 May 2001 (17.05.2001), page 14, line 28 - page 15, line 5; page 25, line 10 - line 14; page 28, line 18 - line 20, claims 1-2,4,6 ---	1,4-10

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B" earlier application or patent but published on or after the international filing date	"Y"	document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

2 February 2005

Date of mailing of the international search report

07-02-2005

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. + 46 8 666 02 86

Authorized officer

Mårten Hulthén/MP  
Telephone No. + 46 8 782 25 00

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000629

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE WPI Week 198635 Derwent Publications Ltd., London, GB; AN 1986-231264 & SU 1206327 A (LENINGRAD LENSOVET TECH) 23 January 1986 (1986-01-23) abstract  --	1-27
A	US 2954276 A (WAYNE C. HAZEN), 27 Sept 1960 (27.09.1960), column 2, line 49 - line 52, claim 5, example VIII  --	1-27
A	US 4150976 A (RICHARD J. DAIN), 24 April 1979 (24.04.1979), column 6, line 49 - line 52, abstract  --	1-27
A	US 4963264 A (JAMES C. DAVIS), 16 October 1990 (16.10.1990), claims 1,6-7  --	1-27
A	Separation Science and Technology, Volume 34, No 16, 1999, Robert J. Fischer et al, "Silica-Polyamine Composite Materials for Heavy Metal Ion Removal, Recovery, and Recycling. II. Metal Ion Separations from Mine Wastewater and Soft Metal Ion Extraction Efficiency" page 3125 - page 3137  --	1-27
A	DE 2646857 B1 (DUISBURGER KUPFERHÜTTE), 17 November 1977 (17.11.1977), claim 1  -----	1-27

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

31/12/2004

PCT/FI 2004/000629

US	3682589	A	08/08/1972	NONE		
WO	0134856	A1	17/05/2001	AU	1258101 A	06/06/2001
				AU	PQ393499 D	00/00/0000
				CA	2389658 A	17/05/2001
				EP	1235941 A	04/09/2002
				NZ	518993 A	25/10/2002
US	2954276	A	27/09/1960	NONE		
US	4150976	A	24/04/1979	AU	511998 B	18/09/1980
				AU	4734079 A	03/01/1980
				BE	876905 A	01/10/1979
				BR	7903823 A	20/02/1980
				CA	1119817 A	16/03/1982
				DE	2924657 A	20/12/1979
				DK	252779 A	20/12/1979
				ES	481674 A	01/03/1980
				FI	791871 A	20/12/1979
				FR	2429262 A,B	18/01/1980
				GB	2023114 A,B	28/12/1979
				IE	48424 B	09/01/1985
				IE	791108 L	19/12/1979
				IT	1209390 B	16/07/1989
				IT	7923679 D	00/00/0000
				JP	1183509 C	27/12/1983
				JP	55041983 A	25/03/1980
				JP	58017815 B	09/04/1983
				MX	151714 A	14/02/1985
				NO	792025 A	20/12/1979
				SE	446015 B,C	04/08/1986
				SE	7905352 A	20/12/1979
				ZA	7902620 A	24/09/1980
US	4963264	A	16/10/1990	BR	8904560 A	19/03/1991
DE	2646857	B1	17/11/1977	ES	463173 A	01/07/1978